

### ABSTRACT OF THE DISCLOSURE

The invention provides anti-thiol reagents which inhibit enzyme activity of cell-associated protein disulfide isomerase (PDI) by oxidizing or blocking PDI active site vicinal thiol groups which normally participate in disulfide bond rearrangement of PDI substrates. Inhibition of this PDI function is particularly useful in blocking PDI-mediated entry of HIV or other virions into a host cell, as well as inhibiting lymphocyte traffic through the lymph nodes. The invention further provides an assay for the identification of such PDI inhibitors based on the discovery that inhibitors of the invention also induce shedding of the leucocyte L-selectin adhesion molecule.